

IN THE CLAIMS

Please amend claims 1-22 and 25 as follows:

gpc 1 1. (currently amended) Transmission system comprising a
2 transmitter with an encoder for encoding an audio signal, the
3 encoder comprises frequency determining means for determining a
4 frequency of at least one periodical component of the audio signal,
5 the transmitter further comprises transmitting means for
6 transmitting a signal representing said frequency to a receiver,
7 said receiver comprises receiving means for receiving a signal
8 representing said frequency from the transmitter, and a decoder for
9 deriving a reconstructed audio signal on the basis of said
B4 10 frequency, ~~characterized in that~~ wherein the encoder further
11 comprises frequency change determining means for determining a
12 frequency change of said at least one periodical component of the
13 audio signal over a predetermined amount of time.

1 2. (currently amended) Transmission system according to claim
2 1, ~~characterized in that~~ wherein the transmitting means are
3 arranged for transmitting a further signal representing said
4 frequency change to the receiver, ~~in that~~ the receiver is arranged

5 for receiving said further signal, and ~~in that~~ the decoder is
6 arranged for deriving said reconstructed audio signal also on basis
7 of said frequency change.

1 3.(currently amended) Transmission system according to claim
2 1, ~~characterized in that~~ wherein the encoder comprises means for
3 determining a fundamental frequency from the audio signal using
4 said frequency change.

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4. (currently amended) Transmission system according to claim
2 1, ~~characterized in that~~ wherein the encoder comprises time
3 transforming means for obtaining a time transformed audio signal,
4 wherein the time transforming means are arranged for time
5 compressing the audio signal during a first part of the
6 predetermined amount of time and for time expanding the audio
7 signal during a second part of the predetermined amount of time in
8 such a way that the time transformed audio signal has a smaller
9 frequency change than the audio signal.

1 5.(currently amended) Transmission system according to claim
2 1, ~~characterized in that~~ wherein the frequency change determining
3 means comprise time transform determining means for deriving a

4 plurality of time transformed audio signals, each corresponding to
5 a different time transform, and ~~in that~~ wherein the time transform
6 determining means comprise selection means for selecting the time
7 transform corresponding to the time transformed audio signal having
8 a smallest frequency change over said predetermined amount of time.

1 6. (currently amended) Transmission system according to claim
2 5, ~~characterized in that~~ wherein the time transform determining
3 means are arranged for selecting the time transformed audio signal
4 having the smallest frequency change over said predetermined amount
5 of time by selecting the time transformed audio signal having the
6 highest peak in its autocorrelation function.

1 7. (currently amended) Transmission system according to claim
2 4, ~~characterized in that~~ wherein the time transform is defined by a
3 quadratic relation between the actual time and the transformed
4 time.

1 8. (currently amended) Transmission system according to claim
2 7, ~~characterized in that~~ wherein the relation between the actual
3 time t and the transformed time τ is defined by

4 $\tau(t) = \frac{a}{T} \cdot t^2 + (1-a) \cdot t$; $0 \leq t \leq T$ in which a is a parameter defining the
5 time transform and T is the duration of a signal segment.

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1 9. (currently amended) Transmitter with an encoder for encoding
2 an audio signal, the encoder comprises frequency determining means
3 for determining a frequency of at least one periodical component of
4 the audio signal, the transmitter further comprises transmitting
5 means for transmitting a signal representing said frequency,
6 ~~characterized in that~~ wherein the encoder further comprises
7 frequency change determining means for determining a frequency
8 change of said at least one periodical component of the audio
9 signal over a predetermined amount of time.

BY
1 10. (currently amended) Transmitter according to claim 9,
2 ~~characterized in that~~ wherein the transmitting means are arranged
3 for transmitting a further signal representing said frequency
4 change.

1 11. (currently amended) Transmitter according to claim 9,
2 ~~characterized in that~~ wherein the encoder comprises means for
3 determining a fundamental frequency from the audio signal under use

4 of said change of said fundamental frequency over a predetermined
5 amount of time.

1 12.(currently amended) Transmitter according to claim 9,
2 ~~characterized in that~~ wherein the encoder comprises time
3 transforming means for obtaining a time transformed audio signal,
4 wherein the time transforming means are arranged for time
5 compressing the audio signal during a first part of the
6 predetermined amount of time and for time expanding the audio
7 signal during a second part of the predetermined amount of time in
8 such a way that the time transformed audio signal has a smaller
9 frequency change than the audio signal.

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1 13.(currently amended) Receiver comprising receiving means
2 for receiving an encoded audio signal representing an audio signal
3 by at least a frequency of at least one periodical component of the
4 audio signal, and a decoder for deriving a reconstructed audio
5 signal on the basis of said frequency, ~~characterized in that~~
6 wherein the receiver is arranged for receiving a further signal
7 representing a frequency change of said at least one periodical
8 component of said audio signal over a predetermined amount of time,

9 and ~~in that~~ the decoder is arranged for deriving said reconstructed
10 audio signal also on the basis of said frequency change.

1 14. (currently amended) Receiver according to claim 13,
2 ~~characterized in that~~ wherein the decoder comprises time
3 transforming means for obtaining the reconstructed audio signal by
4 time transforming a decoded signal wherein the time transforming
5 means are arranged for time expanding the decoded signal during a
6 first part of the predetermined amount of time and for time
7 compressing the decoded signal during a second part of the
8 predetermined amount of time in such a way that the time
9 transformed decoded signal has a larger frequency change than the
10 decoded signal.

SE 15. (currently amended) Encoder for encoding an audio signal,
2 the encoder comprises means for determining a frequency of at least
3 one periodical component of the audio signal, and for deriving a
4 signal representing said frequency, ~~characterized in that~~ wherein
5 the encoder further comprises frequency change determining means
6 for determining a signal representing a frequency change of said at
7 least one periodical component over a predetermined amount of time.

1 16. (currently amended) Encoder according to claim 15,
2 ~~characterized in that~~ wherein the encoder comprises time
3 transforming means for obtaining a time transformed audio signal,
4 wherein the time transforming means are arranged for time
5 compressing the audio signal during a first part of the
6 predetermined amount of time and for time expanding the audio
7 signal during a second part of the predetermined amount of time in
8 such a way that the time transformed audio signal has a smaller
9 frequency change than the audio signal.

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1 17. (currently amended) Decoder for deriving a reconstructed
2 audio signal from an encoded audio signal representing said audio
3 signal by at least a frequency of at least one periodical component
4 of the audio signal, and a decoder for deriving a reconstructed
5 audio signal on the basis of said frequency, ~~characterized in that~~
6 wherein the decoder is arranged for deriving said reconstructed
7 audio signal also on the basis of a further signal representing a
8 frequency change of said at least one periodical component over a
9 predetermined amount of time.

1 18. (currently amended) Decoder according to claim 17,
2 ~~characterized in that~~ wherein the decoder comprises time

3 transforming means for obtaining the reconstructed audio signal by
4 time transforming a decoded signal wherein the time transforming
5 means are arranged for time expanding the decoded signal during a
6 first part of the predetermined amount of time and for time
7 compressing the decoded signal during a second part of the
8 predetermined amount of time in such a way that the reconstructed
9 audio signal has a larger frequency change than the decoded signal.

19. (currently amended) Method for encoding an audio signal

2 comprising determining a frequency of at least one periodical
3 component, ~~and deriving a signal representing said frequency of at~~
4 ~~least one periodical component of the audio signal, characterized~~
5 ~~in that the method further comprises and~~ determining a signal
6 representing a frequency change of said at least one periodical
7 component of the audio signal over a predetermined amount of time.

20. (currently amended) Method according to claim 19,

2 ~~characterized in that the method comprises~~ further comprising
3 deriving a time transformed audio signal, ~~the method further~~
4 ~~comprising and~~ time compressing the audio signal during a first
5 part of the predetermined amount of time and for time expanding the
6 audio signal during a second part of the predetermined amount of

7 time in such a way that the time transformed audio signal has a
8 smaller frequency change than the audio signal.

1 21.(currently amended) Method for deriving a reconstructed
2 audio signal from an encoded audio signal representing said audio
3 signal by at least a frequency of at least one periodical component
4 of the audio signal, and a decoder for deriving a reconstructed
5 audio signal on basis of said frequency, ~~characterized in that~~
6 wherein the method comprises deriving said reconstructed audio
7 signal also on basis of a further signal representing a frequency
8 change of said at least one periodical component of the audio
9 signal over a predetermined amount of time.

1 22.(currently amended) Method according to claim 21,
2 ~~characterized in that the method comprises~~ further comprising
3 deriving the reconstructed audio signal by a time transforming of a
4 decoded signal wherein the time transforming comprises time
5 expanding the decoded signal during a first part of the
6 predetermined amount of time and for time compressing the decoded
7 signal during a second part of the predetermined amount of time in
8 such a way that the time transformed decoded signal has a larger
9 frequency change than the decoded signal.

1 23.(previously amended) Storage medium carrying a computer
2 program for performing a method according to claim 19.

1 24.(previously amended) Signal carrying a computer program
2 for performing a method according to claim 19.

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25.(currently amended) Encoded audio signal representing said
2 audio signal by at least a frequency of at least one periodical
3 component of the audio signal, ~~characterized in that~~ wherein the
4 encoded audio signal comprises a further signal component
5 representing a frequency change of said at least one periodical
6 component over a predetermined amount of time.

1 26.(original) Storage medium carrying an encoded audio signal
2 according to claim 23.